Horned Grebe (Podiceps auritus)

(5 subspecies/populations; 1 within plan area)

Population Trend (PT)

P. auritus cornutus—unknown (Delany and Scott 2002)

"a considerable decline has been noted in recent years, paralleling the decline in many inland-nesting waterfowl...a decline has mainly been noted in the southwest" (O'Donnel and Fjeldsa 1997)

"formerly may have bred farther south and especially east than at present...interior wintering population in North America presumably increased in mid-twentieth century following construction of many large reservoirs from 1930s to 1960s...breeding range has shown slow, long-term contraction northwestward...BBS data show significant negative trend continent-wide 1966-1996...data from BBS routes of limited usefulness...areas of densest breeding cannot be reliably determined from BBS data...annual, continent-wide CBC data (1964-1997) also show slow decline, however CBC numbers represent only small portion of estimated North American population" (Stedman 2000)

"data from BBS routes of limited usefulness..." (R. Russell, pers.comm.)

BBS data survey-wide analysis shows a significant long-term (1966-2004) decrease of 3.5% per year (Sauer et al., 2005)

In a population study near Yellowknife in the Northwest Territories from 1986 to 2002, there was a slight non-significant decrease in the yearly abundance of adult Horned Grebes during the breeding season. During the same time period, there was a greater reduction in productivity, as measured by the average number of adults and young counted during July and August surveys and the number of ponds on which broods were raised (CWS unpub. data)

PT FACTOR SCORE=4

Population Size (PS)

P. auritus cornutus—100,000-1,000,000 total individuals (Delany and Scott 2002: O'Donel and Fjeldsa 1995, Jehl 2001—estimates >100,000)

"P. a. cornutus may be the commonest grebe in North America..." (O'Donnel and Fjeldsa 1997)

"CBC data underestimate population considerably..." (Stedman 2000)

Conservation Concern Category: *High Concern*

Suggest a PS factor score of 2, as the few population estimates seem to have the numbers more solidly within the 2 range than the 1 range, which seems on the high side (Bazin, pers. comm.).

PS FACTOR SCORE=2

Threats to Breeding Populations (TB)

"decline possibly reflecting drying-up of many of the pothole areas..." (O'Donnel and Fjeldsa 1997)

"shooting not known as source of significant losses...significant DDE detected in eggs...elevated dioxins and furans detected in livers...disturbance at nest potential...within North America, degradation of breeding sites results mainly from agricultural activities (e.g., mowing of lacustrine vegetation in dry years, eutrophication of aquatic sites resulting from build-up of fertilizers, and pesticide build-up ..." (Stedman 2000)

TB FACTOR SCORE=4

Threats to Non-breeding Populations (TN)

"vulnerable to oil spills in the marine environment..." (O'Donnel and Fjeldsa 1997)

"many oiling instances involve this species...moderately vulnerable to oiling in northeast Pacific...seasonal mortality from fishing nets substantial...oil spills and pesticide accumulation represent most serious threats to continued suitability of wintering range...deserves same status throughout winter range along coasts, especially in se. U.S.... Extensive North American winter range probably prevents catastrophic losses from isolated spills...seasonal mortality from fishing nets substantial in Iceland....." (Stedman 2000)

Although Stedman (pers. comm.) suggested increasing this score to a 5 because of documented pesticide levels and losses from oil spills, he also states that the degree to which these are occurring is unknown and my be small (R. Bazin, pers.comm.)

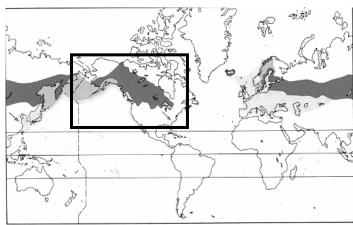
"another threat to non-breeding populations on the Great Lakes is disturbance of staging areas by sport fishing boats and jet skis..." (R. Russell, pers.comm.)

Not much evidence fishing net mortality occurring in N.A., though it may be a problem (R. Bazin, pers.comm)

Threat of entanglement in fishing nets and oil spills in Atlantic as well as Pacific (Marshbird Workshop 2005)

TN FACTOR SCORE=4

Global Range (Harrison 1983; inset=plan area range)



MAP 35 HORNED GREBE Text p.218 Plate 7

Breeding Distribution (BD)

P. auritus cornutus—N USA, Canada, Alaska (Delany and Scott 2002)

2,794,900 km² (plan area distribution; estimated from range maps)

BD FACTOR SCORE=3

Non-breeding Distribution (ND)

P. auritus cornutus—Coastal North America (Delany and Scott 2002); also winters in northern Baja California (Marshbird Workshop 2005)

 $5,354,900 \text{ km}^2$ (plan area distribution; estimated from range maps)

ND FACTOR SCORE=3

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